children and adolescents with FA who underwent allogeneic HSCT in a single institution.

Methodology: Pts were evaluated before and 180 days after HSCT. We evaluated the lean mass (LM) by electrical bioimpedance, nutritional status by anthropometric measurements, the food intake by a 24 hours recall, the BMD by DXA (HOLOGIC-1000) and the serum 25-hydroxyvitamin D (25-OHD).

Results: Between 08/2006 and 09/2008, twenty-four patients were included in the study. Seven pts (29%) died before D + 180 and were excluded from this analysis. 17 pts were able to complete this survey. The median age at admission to the BMT Unit was 8,5ys (5-16ys), 9 pts (53%) were female and 10 pts (59%) received TCTH from unrelated donors. Most patients (88%) developed mucositis while 7 pts (41%) developed acute or chronic graft-versus-host disease (GVHD). Prior to HSCT, 6 patients (35%) had moderate to severe malnutrition, 10 (59%) presented short stature, 2 (12%) had low BMD for age and 11 (65%) had low vitamin D serum levels. The energy consumption was inadequate in 6 (35%) patients and no patient had inadequate protein intake. At 180 days post-HSCT, six (35%) patients had inadequate caloric intake, 1 (5%) patient had inadequate protein intake and 13 patients (76%) had low vitamin D serum levels. A severe weight loss (greater than 5%) occurred in 6 (35%) pts, the LM decreased in 8 (47%) patients and 10 (69%) had a reduction in BMD.

Conclusion: The prevalence of weight, LM and BMD reduction was high after six months of HSCT. The vitamin D serum levels were low before and after HSCT. Pre-transplant nutritional care and nutritional status monitoring of these patients are essential to ensure proper growth and development, reducing at the most as possible the nutritional deficit during treatment.

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LONG-TERM IMPACT OF HEMATOPOIETIC STEM CELL TRANSPLANTATION ON THE NUTRITIONAL STATUS OF INFANTS

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Introduction: During the first 2 years of life the adequate nutritional status (NS) maintenance is crucial to ensure full growth and development.

Objectives: Evaluate changes in NS of infants undergoing HSCT in Curitiba-Brazil during hospitalization and the long-term impact in the NS. Analyze the nutritional therapy applied and implications of this intervention to the patient's outcome.

Methods: Data was collected retrospectively from medical records considering the anthropometry at the time of hospitalization and last outpatient visit. All pts younger than 2 years-old, transplanted between 12/1990 and 11/2007 were included.

Results: 53pts were included, 38 (72%) were male, age was 13.5 ± 6.2 months, 43 pts (81%) had non malignant diseases, 29 (55%) received HSCT from unrelated donors. At hospitalization 17 pts (32%) showed mild to moderate malnutrition and 8 pts (15%) severe malnutrition. At hospital discharge, 21 pts (40%) showed mild to moderate malnutrition and 9 pts (17%) severe malnutrition. During hospitalization 6 pts (11%) lost 5-10% of body weight and 3 pts (6%) lost over 10%. There was no relationship between the baseline NS and survival, and between pathology, length of hospital stay and weight loss. 14 pts (26%) received tube feeding (TF) for 12.7 ± 11.5 days, to supply an average of 30.4 kcal/kg/day and 0.9 g protein/kg/day. 22 (42%) patients received parenteral nutrition (PN) for 15.7 ± 6.1 days to supply 49.8 kcal/kg/day and 1.5 g protein/kg/day. There was no statistical difference in the incidence of vomiting, diarrhea and hyperglycemia among patients who received TF, PN or exclusively oral feeding. 30 pts survived at least one year with a median follow up of 2540 ± 1448 days. Age was 6.4 ± 3.9 years at the latest evaluation, 11 pts (33%) developed GVHD. Regarding the current NS, 19 pts (58%) had short stature, 13 pts (39%) showed mild to moderate malnutrition and 4 pts (12%) had severe malnutrition. Analyzing the height/age curve, 15 pts (45%) did not reach an ascendant growth curve after HSCT and 14 pts (42%) did not reach an ascendant weight/age curve.

Conclusion: We observed a high prevalence of malnutrition prior to HSCT and many pts persisted with long term deficits in height and weight after transplant. The use of TF did not lead to increased gastrointestinal complications and could be used in order to prevent weight loss during HSCT and diminish nutritional long term complications.

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TWO YEARS WORKING: EXPERIENCE OF THE FIRST EXCLUSIVELY PEDIATRIC HEMATOPOIETIC STEM CELL TRANSPLANT PROGRAM IN COLOMBIA, SOUTHAMERICA

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We describe the experience after two years working at the first exclusively Pediatric Hematopoietic Stem cell Facility in Bogota, Colombia. 26 hematopoietic stem cell transplants (HSCT) have been done in our program. 15 (57%) allogeneic and 11(43%) autologous HSCTs. Between allogeneic transplants all donors have been match related donors, 53% of allogeneic transplants because acute leukemia and 47% congenital or acquired bone marrow failure. Between autologous transplants 11 patients, 6 high risk neuroblastoma (55%), Relapsed Hodgkin disease (18%), AML (9%), PNET (9%) and Non Hodgkin lymphoma (9%). Primary results after two years are carefully described. Transplant related mortality is 11.5%, overall survival and event free survival are 50% and 50% respectively in a follow up of one year. We conclude that in a pediatric population is usual have more allogeneic transplants because of non malignant diseases, the primary results are comparable with those for long term experience centers given that the isolation rooms, pediatric facilities, Pediatric Intensive care in situ, and the well designed supportive care strategies.

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THE IMPACT OF ROUTINE RANGE OF MOTION ASSESSMENT ON THE EARLY IDENTIFICATION OF GRAFT VERSUS HOST DISEASE IN ALLOGENEIC BONE MARROW TRANSPLANT RECIPIENTS

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Purpose: To explore the relationship between monthly range of motion assessment in allogeneic bone marrow transplant (BMT) recipients and how it impacts early identification of graft versus host disease (GvHD) and improved functional outcomes for this population.

Abstract: Acute and chronic GvHD is prevalent in allogeneic BMT recipients and can lead to debilitating skin and joint issues affecting quality of life and mobility. As standard of care, these recipients receive Occupational and Physical Therapy services to combat or prevent sequelae from this debilitating disorder. A recent review of GvHD and Physical Therapy literature illustrates a lack of early identification/prediction methods for this disorder. Very few studies describe specific therapeutic interventions as prophylaxis utilizing the expertise of Occupational and Physical Therapy personnel. This institution hopes to change that and devise a method of useful follow up.

The study population includes allogeneic BMT recipients ages zero to 18 years old. The control group consists of the past 20 allogeneic bone marrow recipients and the experimental group includes the next 20. Standard goniometry will be the assessment tool utilized for passive range of motion. A baseline measurement will be obtained during transplant admission, once a month for the next six months, followed by every two to three months from month six to 24 on all participants in the experimental group. The control group will receive standard goniometry assessment upon the diagnosis of any GvHD, and/or at one year post transplant or with their next visit if past one year. Functional outcomes will be measured using the WeeFIM®, which is an 18-item assessment of what a child actually does.